

We claim:

1. A method of buffering packets of audio data to reduce jitter, the audio data including a plurality of bursts separated by silence, the method comprising the steps of:

adding incoming packets of audio data to a buffer in an order generated;

5 detecting when the buffer contains an amount of audio data which matches a predetermined threshold amount;

detecting when a burst has ended; and

playing the audio data contained in the buffer either when the buffer contents have reached said predetermined threshold, or when a burst has ended.

10 2. The method of claim 1, wherein each of said bursts includes an end packet, wherein the step of detecting when a burst has ended comprises detecting an end packet.

15 3. The method of claim 2, wherein each end packet includes an end flag.

4. The method of claim 1, further comprising periodically adjusting the threshold.

20 5. The method of claim 4, further comprising:
periodically measuring at a length of a burst; and
resetting the threshold to as a factor of the length of the most recently measured burst.

6. The method of claim 4, wherein the audio packets arrive during a series of sampling periods, further comprising:

measuring respective jitter times between packets received during a

5 current sample period to determine a measured jitter amount;

calculating an adjusted threshold time as a factor of the measured jitter amount; and

resetting the threshold to the adjusted threshold time to be applied during a subsequent sampling period.

10 7. The method of claim 6, wherein each sampling period is one of said bursts.

8. The method of claim 6, wherein each sampling period is a predetermined
15 period of time.

9. The method of claim 6, the method further comprising setting the threshold at a default value during an initial sampling period.

20 10. The method of claim 6, wherein the calculating step includes determining an average jitter time between at least some of the packets in the sample period, the adjusted threshold time equaling at least the average jitter time.

11. The method of claim 10, wherein the adjusted threshold time equals more than the average jitter time.

12. The method of claim 6, further comprising repeating the measuring,
5 calculating and resetting steps during each sampling period.

13. The method of claim 1, further comprising, after the step of detecting when a burst has ended, waiting for at least a predetermined minimal silent period before playing subsequent packets.

10 14. A computer-readable medium having computer-executable instructions for a method of buffering packets of audio data to reduce jitter, the audio data including a plurality of bursts separated by silence, the method comprising:

adding incoming packets of audio data to a buffer in an order generated;

15 detecting when the buffer contains an amount of audio data which matches a predetermined threshold amount;

detecting when a burst has ended; and

playing the audio data contained in the buffer either when the buffer contents have reached said predetermined threshold, or when a burst has ended.

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15. The computer readable medium of claim 14, wherein each of said bursts includes an end packet, wherein the step of detecting when a burst has ended comprises detecting an end packet.

16. The computer readable medium of claim 15, wherein each end packet includes an end flag.

5 17. The computer readable medium of claim 14, the method further comprising periodically adjusting the threshold.

18. The computer readable medium of claim 17, the method further comprising:

10 periodically measuring at a length of a burst; and
resetting the threshold to as a factor of the length of the most recently measured burst.

15 19. The computer readable medium of claim 17, wherein the audio packets arrive during a series of sampling periods, further comprising:

measuring respective jitter times between packets received during a

current sample period to determine a measured jitter amount;

calculating an adjusted threshold time as a factor of the measured jitter

amount; and

20 resetting the threshold to the adjusted threshold time to be applied during a

subsequent sampling period.

20. The computer readable medium of claim 19, wherein each sampling period is one of said bursts.

21. The computer readable medium of claim 19, wherein each sampling
5 period is a predetermined period of time.

22. The computer readable medium of claim 19, the method further comprising setting the threshold at a default value during an initial sampling period.

10 23. The computer readable medium of claim 19, wherein the calculating step includes determining an average jitter time between at least some of the packets in the sample period, the adjusted threshold time equaling at least the average jitter time.

15 24. The computer readable medium of claim 23, wherein the adjusted threshold time equals more than the average jitter time.

25. The computer readable medium of claim 19, the method further comprising repeating the measuring, calculating and resetting steps during each sampling period.

20 26. The computer readable medium of claim 14, the method further comprising, after the step of detecting when a burst has ended, waiting for at least a predetermined minimal silent period before playing subsequent packets.